## **Permit to Operate**

FACILITY: N-770 EXPIRATION DATE: 04/30/200

**LEGAL OWNER OR OPERATOR**: RIPON COGENERATION **MAILING ADDRESS**: 944 S STOCKTON AVE

**RIPON, CA 95366** 

**FACILITY LOCATION:** 944 S STOCKTON AVE

RIPON, CA 95366

**FACILITY DESCRIPTION:** COGENERATION FACILITY

The Facility to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

The Permit to Opertae remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

DAVID L. CROW

Executive Director / APCO

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**Diector of Permit Services** 

## San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-770-0-1 **EXPIRATION DATE:** 04/30/2005

**EQUIPMENT DECRIPTION:** 

- 1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; and San Joaquin County Rule 110], [Federally Enforceable Through Title V]
- 2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; and San Joaquin County Rule 110], [Federally Enforceable Through Title V]
- 3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0], [Federally Enforceable Through Title V]
- 4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020. [District Rule 2010, 3.0 and 4.0; 2020; and San Joaquin County Rule 201], [Federally Enforceable Through Title V]
- 5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.9.1 and 9.13.1], [Federally Enforceable Through Title V]
- 6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031], [Federally Enforceable Through Title V]
- 7. Every application for a permit required under Rule 2010 (Permits Required) shall be filed in a manner and form prescribed by the District. [District Rule 2040]
- 8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 5) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.5.1], [Federally Enforceable Through Title V]
- 9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
- 10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.6.1], [Federally Enforceable Through Title V]
- 11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520. [District Rules 2520, 9.6.2 and 1100, 7.0], [Federally Enforceable Through Title V]
- 12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit . [District Rule 2520, 9.8], [Federally Enforceable Through Title V]

- 13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.9.1], [Federally Enforceable Through Title V]
- 14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.9.3], [Federally Enforceable Through Title V]
- 15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.9.4], [Federally Enforceable Through Title V]
- 16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliancewith the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.9.5], [Federally Enforceable Through Title V]
- 17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.10], [Federally Enforceable Through Title V]
- 18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.14.2.1], [Federally Enforceable Through Title V]
- 19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.14.2.2], [Federally Enforceable Through Title V]
- 20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.14.2.3], [Federally Enforceable Through Title V]
- 21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.14.2.4], [Federally Enforceable Through Title V]
- 22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101, by using EPA method 9. If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and San Joaquin County Rule 401], [Federally Enforceable Through Title V]
- 23. No person shall supply, sell, solicit or apply any architectural coating, except specialty coatings, that contains more than 250 grams of VOC per liter of coating (less water and exempt compounds, and excluding any colorant added to tint bases), or manufacture, blend, or repackage such coating with more than 250 grams of VOC per liter (less water and exempt compounds, and excluding any colorant added to tint bases) for use within the District. [District Rule 4601, 5.1], [Federally Enforceable Through Title V]
- 24. No person shall apply, sell, solicit, or offer for sale any specialty architectural coating listed in the Table of Standards (District Rule 4601, Table 1), nor manufacture, blend, or repackage such coating for use within the District, which contains VOCs (less water and exempt compounds, excluding any colorant added to tint bases) in excess of the specified limits listed in Table 1 of Rule 4601. [District Rule 4601, 5.2], [Federally Enforceable Through Title V]
- 25. All VOC-containing materials shall be stored in closed containers when not in use. In use includes, but is not limited to: being accessed, filled, emptied, maintained or repaired. [District Rule 4601, 5.4], [Federally Enforceable Through Title V]
- 26. A person shall not use VOCs for the cleanup of spray equipment unless equipment for collection of the cleaning compounds and minimizing its evaporation to the atmosphere is used. [District Rule 4601, 5.5], [Federally Enforceable Through Title V]
- 27. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.2. [District Rule 4601, 6.1 and 6.2], [Federally Enforceable Through Title V]
- 28. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.14.1 and 10.0], [Federally Enforceable Through Title V]
- 29. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F], [Federally Enforceable Through Title V]
- 30. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, [40 CFR Part 82, Subpart B], [Federally Enforceable Through Title V]

- 31. Disturbances of soil related to any construction, demolition, excavation, extraction, or water mining activities shall comply with the requirements for fugitive dust control in SJVUAPCD District Rule 8020 unless specifically exempted under section 4 of Rule 8020. [District Rule 8020], [Federally Enforceable Through Title V]
- 32. Outdoor handling and storage of any bulk material which emits dust shall comply with the requirements of SJVUAPCD Rule 8030, unless specifically exempted under section 4 of Rule 8030. [District Rule 8030], [Federally Enforceable Through Title V]
- 33. Any paved road over 3 miles in length, and any unpaved roads over half a mile in length, constructed after October 10, 1993 shall use the design criteria and dust control measures of, and comply with the administrative requirements of, SJVUAPCD Rule 8060 unless specifically exempted under section 4 of Rule 8060. [District Rule 8060], [Federally Enforceable Through Title V]
- 34. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M], [Federally Enforceable Through Title V]
- 35. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.17], [Federally Enforceable Through Title V]
- 36. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2], [Federally Enforceable Through Title V]
- 37. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1], [Federally Enforceable Through Title V]
- 38. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following outdated SIP requirements: San Joaquin County Rules 110, 201, 202, 203, 204, 208, 209, 401, and Rule 423. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 39. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92);2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (12/17/92); 4601, sections 5.1, 5.2, 5.4, 5.5, 6.1, and 6.2 (12/17/92); 8020 (4/25/96); 8030 (4/25/96); 8060 (4/25/96). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 40. The facility shall comply with all applicable requirements regarding preparation and implementation of a risk management play by June 21, 1999 and shall abide by all applicable sections of 40 CFR Part 68. [40 CFR 68], [Federally Enforceable Through Title V]
- 41. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 42. On July 6, 2000, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report are based upon this initial permit issuance date, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days of the end of the reporting period. [District Rule 2520], [Federally Enforceable Through Title V]

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-770-1-0 **EXPIRATION DATE:** 04/30/2005

**EQUIPMENT DECRIPTION:** 

ONE 60.1 MMBTU/HR WICKES BOILER

- 1. The boiler may be fired on either natural gas or #2 fuel oil. []
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]

## San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-770-3-3 **EXPIRATION DATE:** 04/30/2005

#### **EQUIPMENT DECRIPTION:**

470 MMBTU/HR GE LM-5000 NATURAL GAS FIRED GAS TURBINE ENGINE WITH STEAM INJECTION AND SELECTIVE CATALYTIC REDUCTION WITH AMMONIA INJECTION SERVING A 49.9 MW COGENERATION PLANT

- 1. The turbine shall be designed and operated at STIG (trademark GE). [District NSR Rule], [Federally Enforceable Through Title V]
- 2. A minimum of 45,000 lbs/hr of steam at 650 PSIG and 550 degrees F shall be available for injection into the combustion section of the turbine for NOx control, except during start-up and shut-down. [District NSR Rule], [Federally Enforceable Through Title V]
- 3. A selective catalytic reduction (SCR) system shall be installed in the path of the heat recovery boiler where the temperature range is 575 degrees F to 750 degrees F. [District NSR Rule], [Federally Enforceable Through Title V]
- 4. The permittee shall provide a continuous temperature monitoring and recording system to indicate the flue gas temperature through the SCR system. [District NSR Rule], [Federally Enforceable Through Title V]
- There shall be no visible emissions (except for uncombined water) from the entire system. [District NSR Rule], [Federally Enforceable Through Title V]
- 6. The turbine shall be fired on natural gas. [District NSR Rule], [Federally Enforceable Through Title V]
- 7. Ammonia shall be injected into the combustion gases at a ratio determined by source testing to reduce the NOx emission concentration to 6 ppm, dry at 15% oxygen, except for start-up periods of one hour duration and shutdown periods of one-half hour. [District NSR Rule], [Federally Enforceable Through Title V]
- 8. The ammonia slip shall not exceed 20 ppmv, dry at 15% oxygen. [District Rule 4102]
- 9. Operator shall not discharge into the atmosphere combustion contaminants (PM) exceeding 0.1 gr/dscf in concentration at the point of discharge. [District Rule 4201, 3.0], [Federally Enforceable Through Title V]
- 10. The NOx emissions shall not exceed 6 ppmv dry @ 15% Oxygen except for start-up periods of one hour duration and shutdown periods of one-half hour duration. [District NSR Rule], [Federally Enforceable Through Title V]
- 11. The CO emissions shall not exceed 200 ppmv dry @ 15% Oxygen except for start-up periods of one hour duration and shutdown periods of one-half hour duration [District Rule 4701, 5.2]
- 12. The NOx emission rate shall not exceed 250 pounds during any one day. [District NSR Rule], [Federally Enforceable Through Title V]
- 13. The CO emission rate shall not exceed 1302 pounds during any one day. [District NSR Rule], [Federally Enforceable Through Title V]
- 14. The VOC emission concentration shall not exceed 0.0133 lb/MMBtu. [District NSR Rule], [Federally Enforceable Through Title V]
- 15. The SOx emission concentration shall not exceed 0.0029 lb/MMBtu. [District NSR Rule], [Federally Enforceable Through Title V]
- 16. The PM10 emission concentration shall not exceed 0.0088 lb/MMBtu. [District NSR Rule], [Federally Enforceable Through Title V]
- 17. The daily emission rate shall be calculated by multiplying the hourly emission rate by the number of operating hours. [District NSR Rule], [Federally Enforceable Through Title V]
- 18. Performance testing for NOx and CO emissions shall be conducted annually using EPA Methods 7E or 20 for NOx and EPA Methods 10 or 10B for CO. Oxygen content of the exhaust gas shall be measured by EPA Methods 3, 3A, or 20. [District Rule 4703, 6.4 and District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 19. The stack height shall be a minimum of 71 feet and shall be adequate for stack sampling pursuant to EPA reference methods for source testing and shall meet all the requirements of District Rule 1081. [District Rule 1081, 3.2], [Federally Enforceable Through Title V]
- 20. The District must be notified 30 days prior to any performance testing and a test plan shall be submitted for District approval 15 days prior to such testing. [District Rule 1081, 7.1], [Federally Enforceable Through Title V]
- 21. Performance testing shall be witnessed or authorized District personnel. Test results must be submitted to the District within 60 day of performence testing. [District Rule 1081, 7.2, 7.3], [Federally Enforceable Through Title V]

- 22. Performance testing for hourly emission rates for NOx and CO shall be conducted using the arithmetic mean of the test runs as outlined in District Rule 1081-"Source Sampling" section 6.0. [District Rule 1081, 6.0], [Federally Enforceable Through Title V]
- 23. If the turbine is fired on PUC-regulated natural gas, then operator shall maintain on file copies of natural gas bills. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 24. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be calculated using ASTM method D 1072, D 3031, D 4084 or D 3246. [40 CFR 60.335(d) and District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 25. If the turbine is not fired on PUC-regulated natural gas, then sulfur content of each fuel source shall be less than 0.00398% by weight, tested weekly except that if the fuel sulfur content requirement has been met for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a quarterly test does not meet the sulfur content requirement, the source must return to weekly testing until eight consecutive weekly tests meet the sulfur content requirement. [40 CFR 60.334(b)(2) and District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 26. The permittee shall provide, properly install, operate, and maintain a continuous monitoring and recording system to measure oxides of nitrogen, carbon monoxide, and oxygen or carbon dioxide. [District Rule 1080, 4.0 and District Rule 4703, 6.2.1], [Federally Enforceable Through Title V]
- 27. The averaging time for the recording systems shall not exceed 15 minutes [District NSR Rule and District Rule 4703, 5.0], [Federally Enforceable Through Title V]
- 28. The continuous emissions monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix B; and 40 CFR 51, Appendix P, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080, 6.5], [Federally Enforceable Through Title V]
- 29. Results of continuous emissions monitoring must be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080, 7.2], [Federally Enforceable Through Title V]
- 30. Records of continuous emissions monitoring system shall be maintained and shall contain: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance of CEMs, and emission measurements. [District Rule 1080, 7.3], [Federally Enforceable Through Title V]
- 31. Permittee shall submit a CEMs written report for each calendar quarter to the District. The report is due on the 30th day following the end of the calendar quarter. Quarterly report shall include: time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 1080, 8.0 and District Rule 2520, 9.6.1], [Federally Enforceable Through Title V]
- 32. Any emissions in excess of the limits imposed by conditions in this permit, as measured by the continuous monitoring equipment constitutes a violation of District Rules and Regulations and shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0], [Federally Enforceable Through Title V]
- 33. Operator shall notify the District no later than eight hours after the detection of a breakdown of the CEM. The operator shall inform the District of the intent to shut down the CEM at least 24 hours prior to the event. [District Rule 1080, 10.0], [Federally Enforceable Through Title V]
- 34. Operator shall maintain a daily log indicating hourly rate of ammonia injection. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 35. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [District Rule 4703, 6.2.4 and District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 36. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: 40 CFR 60.332(a) & (b); 60.333 (a) & (b); San Joaquin County Rules 404 & 108; SJVUAPCD Rule 4703, Section 6.2.2. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 37. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4801, 4201, 1081 and 1080, Sections 4.0, 6.5, 7.2, 7.3, 8.0, 9.0, and 10.0; San Joaquin County Rule 407; 60.334(b): and 60.335(d). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 38. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rule 4703, sections 5.0, 5.1.1, 6.2.1, 6.2.4, 6.4.1, and 6.4.3. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

## San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-770-4-0 **EXPIRATION DATE:** 04/30/2005

**EQUIPMENT DECRIPTION:** 

MODIFICATION OF AP88-40 SCR CATALYST

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. All equipment or systems installed or used to achieve compliance with the terms and conditions of the Authority to Construct shall be maintained in good working order and be operated as efficiently as possible to minimize air pollution emissions. [District NSR Rule]
- 3. The permittee shall comply with all other applicable local, State, and Federal rules and regulations. []
- 4. The District shall be notified of any breakdown conditions in accordance with Rule 1100 (Equipment Breakdown). [District Rule 1100]
- 5. The District shall be notified in writing within ten (10) days following the correction of any breakdown condition in accordance with Rule 1100 (Equipment Breakdown). [District Rule 1100]
- 6. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100]
- 7. The District, CARB, EPA, and/or authorized representatives, upon presentation of credentials, shall be permitted to enter upon premises where the source is located or in which any records are kept under the terms and conditions of this permit. [CH&SC 41510]
- 8. The APCO or any authorized representative, upon request, shall have access to, and copies of, any records required to be kept under the terms and conditions of this permit. [CH&SC 42303]
- 9. The APCO or any authorized representative, upon request, shall have access to inspect any equipment, operation, or method required in this permit, and to sample emissions from the source or require samples to be taken. [District Rule 1081]
- 10. Should any provision, clause, sentence, paragraph, section or part of these conditions for any reason be judged invalid, such judgement shall not affect or invalidate the remainder of these conditions. [District Rule 1130]
- 11. The NOx emissions shall not exceed 6 ppm dry @ 15% Oxygen except for start-up periods of one hour duration and shutdown periods of one-half hour duration. []
- 12. The combustion parameters shall be adjusted to keep the NOx emissions at the minimum and the CO emissions at a level which does not cause an ambient CO concentration of .5 ppm or more based on dispersion modeling techniques approved by the APCO. []
- 13. The particulate matter emisssions shall not exceed 150 pounds during any one day. []
- 14. The hydrocarbon emissions (excluding methane) shall not exceed 150 pounds during any one day. []
- 15. The carbon monoxide emissions shall not exceed 1302 pounds during any one day. []
- 16. Compliance with all daily limits shall be demonstrated by source testing according to methods and procedures approved by the APCO. The daily emission rate must be determined by multiplying the hourly emission rate by the number of operating hours. []
- 17. The turbine shall be fired on natural gas only. []
- 18. The turbine shall be designed and operated at STIG (trademark GE). []
- 19. A minimum of 45,000 #/hr of steam at 650 PSIG and 550 degrees F shall be available for injection into the combustion section of the turbine for NOx control, except during start-up and shut-down. []
- 20. A selective catalytic reduction (SCR) system shall be installed in the path of the heat recovery boiler where the temperature range is 575 degrees F to 750 degrees F. []
- 21. Ammonia shall be injected into the combustion gases at a ratio determined by source testing to reduce the NOx emission concentration to 6 ppm, dry at 15% oxygen, except for start-up periods of one hour duration and shutdown periods of one-half hour. []
- 22. The catalyst bed and other components of the SCR system shall be made available for visual inspection by the District at least once a year. The District shall be notified at least 30 days prior to scheduling such inspections. []

- 23. The ammonia slip shall not exceed 20 ppmv, dry at 15% oxygen. []
- 24. The permittee shall provide, properly install, operate, and maintain a continuous monitoring and recording system to measure oxides of nitrogen, carbon monoxide, and oxygen or carbon dioxide. []
- 25. The averaging time for the recording systems shall not exceed 15 minutes. []
- 26. All continuous monitoring and recording instruments shall be installed, calibrated, operated and shall be reported in accordance with the requirements of 40 CFR, Part 51. []
- 27. The permittee shall provide a continuous temperature monitoring and recording system to indicate the flue gas temperature through the SCR system. []
- 28. A daily log indicating hourly rate of ammonia injection and the pressure drop across the catalyst shall be maintained on the premise at all times. [1]
- 29. The stack height shall be a minimum of 71 feet and shall be adequate for stack sampling pursuant to EPA reference methods for source testing and shall meet all the requirements of District Rule 108.1. []
- 30. There shall be no visible emissions (except for uncombined water) from the entire system. []
- 31. Source testing shall be conducted using the methods and procedures approved by the District. A pretest plan outlining the test methods, procedures, and operating parameters shall be submitted for District approval at least 30 days prior to each test. []
- 32. The results of each source test shall be submitted for the District's evaluation no later than 30 days after each testing date. []
- 33. Any emission indicated by the continuous emission monitoring system which is in excess of these permit conditions and/or the applicable Rules and Regulations, shall be considered a violation of the applicable emission limits. []
- 34. The data recorded by the continuous emission monitoring system shall be kept on the premises for a minimum of two years. []

## San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-770-7-1 **EXPIRATION DATE:** 04/30/2005

#### **EQUIPMENT DECRIPTION:**

ONE (1) 94 MMBTU/HR HOLMAN BOILER (MODEL # WT9609-1004 GP) WITH AN EDGE LOW NOX BURNER AND FGR SYSTEM

- 1. Particulate matter emissions from any combustion source shall not exceed 0.1 grains/dscf (calculated to 12% CO2). [District Rule 4201, 3.0; and District Rule 4301, 5.1], [Federally Enforceable Through Title V]
- 2. The boiler shall be fired on natural gas. [District NSR Rule], [Federally Enforceable Through Title V]
- 3. The VOC emissions concentration shall not exceed 0.0001 pounds per MMBtu. [District NSR Rule], [Federally Enforceable Through Title V]
- 4. The NOx emissions concentration shall not exceed 30 ppmv, dry, corrected to 3% oxygen (O2). [District NSR Rule], [Federally Enforceable Through Title V]
- 5. The CO emissions concentration shall not exceed 280 ppmv, dry, corrected to 3% oxygen (O2). [District NSR Rule], [Federally Enforceable Through Title V]
- 6. The PM10 emissions concentration shall not exceed 0.001 pounds per MMBtu. [District NSR Rule], [Federally Enforceable Through Title V]
- 7. The SOx emissions concentration shall not exceed 3 ppmv, dry, corrected to 3% oxygen (O2). [District NSR Rule], [Federally Enforceable Through Title V]
- 8. Performance testing for NOx and CO emissions shall be conducted within 90 days of initial startup and annually thereafter using following test methods: EPA Method 7E (or ARB Method 100) for NOx (ppmv), EPA Method 10 (or ARB Method 100) for CO, EPA Method 3 or 3A (or ARB Method 100) for stack gas oxygen, EPA Method 2 for stack gas velocity, and EPA Method 4 for stack gas moisture content. [District Rule 4305, 6.2, 6.3 and District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 9. The unit may be tested once every 36 months, if the performance testing shows compliance for 2 consecutive years. If a performance test shows noncompliance with any of the requirements, the source shall return to annual performance testing until compliance is again shown for two consecutive years. [District Rule 4305, 6.3 and District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 10. The stack height shall be adequate for stack sampling pursuant to EPA reference methods for performance testing and shall meet all the requirements of District Rule 1081. [District Rule 1081, 3.2], [Federally Enforceable Through Title V]
- 11. The District must be notified 30 days prior to any performance testing and a test plan shall be submitted for District approval 15 days prior to such testing. [District Rule 1081, 7.1], [Federally Enforceable Through Title V]
- 12. Performance testing shall be witnessed or authorized District personnel. Test results must be submitted to the District within 60 day of performence testing. [District Rule 1081, 7.2, 7.3], [Federally Enforceable Through Title V]
- 13. If the boiler is fired on PUC-regulated natural gas, then operator shall maintain on file copies of natural gas bills. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 14. If the boiler is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be calculated using ASTM method D 1072, D 3031, D 4084 or D 3246. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 15. If the boiler is not fired on PUC-regulated natural gas, then sulfur content of each fuel source shall be less than 0.0062% by weight, tested weekly except that if the fuel sulfur content requirement has been met for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a quarterly test does not meet the sulfur content requirement, the source must return to weekly testing until eight consecutive weekly tests meet the sulfur content requirement. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 16. The acceptable minimum flue gas recirculation rate shall be established by testing emissions from this unit or other representative units as approved by the District. The acceptable flue gas recirculation rate shall be the minimum flue gas recirculation rate with at which compliance with applicable NOx and CO emissions rates have been demonstrated through performance testing. [District Rule 4305 and District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 17. The flue gas recirculation rate shall be determined at least on a weekly basis by measuring the stack temperature (Ts), windbox temperature (Tw), and ambient temperature (Ta) and using the following equation: FGR rate = {(Tw Ta)/Ts Ta)}\*100%. [District Rule 4305 and District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

- 18. The permittee shall maintain records of the date and time of temperature measurements, the measured temperatures, and the calculated flue gas recirculation rate. The records shall also include a description of any corrective action taken to maintain the flue gas recirculation rate above the minimum acceptable rate. These records shall be made available for the District inspection upon request. [District Rule 4305 and District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 19. If the flue gas recirculation rate is less than the acceptable level, the permittee shall notify the District and take corrective action within one (1) hour after detection. If the flue gas recirculation rate is not corrected promptly, the permittee shall conduct an emissions test within 60 days, utilizing District-approved test methods, to demonstrate compliance with the applicable emissions limits at the lower flue gas recirculation rate. [District Rule 4305 and District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 20. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: San Joaquin County Rules 404, 407, 407.1, 407.2, & 408; and SJVUAPCD Rules 4201, 4301, & 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]